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IN THE

Supreme Court of the United States

October Term 1974

No. .....

RESEARCH CORPORATION,
Petitioner,

v.

NASCO INDUSTRIES, INC.,
Respondent.

PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE SEVENTH CIRCUIT

Petitioner, Research Corporation prays that a Writ of Certiorari be granted to review the portion of the judgment of the United States Court of Appeals for the Seventh Circuit entered in the above entitled cause on June 21, 1974, affirming the decision of the District Court.

QUESTIONS PRESENTED

1. Did this Court in *Graham* v. *John Deere Co.*, 383 U.S. 1 (1966) when it designated commercial success, long felt but unsolved needs, failure of others, etc., as "secondary considerations" in determining obviousness or non-obviousness, mean that such factors could be considered or ignored in making the determination?

2. If the "secondary considerations" may be ignored, under what circumstances may this be done?

3. Did this Court in *Graham* mean that the trial court should make a subjective evaluation of obviousness and non-obviousness before determining whether to consider "secondary considerations"?

CITATIONS TO OPINIONS BELOW

The District Court's opinion is not reported and is printed at A-1.[1]

The opinion of the Court of Appeals dated June 21, 1974, is reported at 501 F.2d 358 and is printed at A-18. The order of the Court of Appeals denying a rehearing appears at A-26.

JURISDICTION

The Judgment of the United States Court of Appeals for the Seventh Circuit affirming a portion of a judgment of the United States District Court for the Western District of Wisconsin was entered on June 21, 1974. The Court of Appeals denied a timely petition for rehearing on July 31, 1974. The jurisdiction of this Court is invoked under 28 U.S.C. § 1254(1).

STATEMENT OF CASE

Petitioner, Research Corporation, filed this patent infringement action on November 1, 1968. Jurisdiction of the District Court was founded on 28 U.S.C. § 1338(a). Research Corporation is the assignee of the patent in suit, United States Patent No. 3,362,381, issued in the name of Dr. R. Keith Farrell for Cryogenic Branding of Animals.

Initially, L & H Manufacturing Company, a North Dakota based manufacturer of the accused freeze branding irons, and its customer, defendant-respondent NASCO Industries, Inc., a Wisconsin retailer of the irons, were named as co-defendants. Subsequently L & H was voluntarily dismissed

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[1] The abbreviation "A" is used herein to designate the Appendix bound with this petition.

without prejudice, making respondent NASCO the sole defendant.

On October 5, 1970 respondent moved for summary judgment claiming the Farrell patent was invalid and not infringed. On January 9, 1973, the District Court entered a summary judgment for respondent, holding in its "Opinion and Order" (A-1) that the Farrell patent was invalid for anticipation (35 U.S.C. 102) and obviousness (35 U.S.C. 103) over the Taylor article and not infringed. The Court of Appeals affirmed the District Court's holding as to obviousness but did not reach the question of infringement.

A. The Farrell Patent

The gist of the invention can be best visualized from Claim 1 of the patent:

> "1. A method of permanently branding living domesticated animals which comprises applying in a predetermined configuration representing insignia to a selected portion of the living animal, said selected portion having normal length hair and normal skin, a supercooled material for a sufficient time to freeze such selected portion and permanently alter the appearance thereof."

The specification states that the application of a supercooled material, such as dry ice or a metal instrument chilled with dry ice and alcohol or in liquid nitrogen, held in contact with the animal's skin, will cause a temporary loss of hair, followed by a regrowth of white hair in the area frozen, or by a permanent loss of hair if the application of cold is carried to the point of destruction of the hair follicles. The regrowth of white hair is particularly effective for marking animals with dark hair. (A-19)

B. Prior Art

The sole prior art reference relied on by both courts in holding the Farrell patent invalid was an article by Dr. A.

Cecil Taylor published in the *Journal of Experimental Zoology,* Vol. 110, p. 77 (1949), entitled "Survival of Rat Skin and Changes in Hair Pigmentation Following Freezing". The Taylor article was thoroughly considered by the Patent Office during the prosecution of Dr. Farrell's application for patent.

The Taylor article describes a series of experiments with laboratory rats. The Appellate Court summarized the experiments thusly (A-19):

> "The prior art references noted on the file wrapper include an article by Dr. A. Cecil Taylor published in the *Journal of Experimental Zoology,* Vol. 110, p. 77 (1949), entitled "Survival of Rat Skin and Changes in Hair Pigmentation Following Freezing". The article describes in detail a series of experiments with laboratory rats. Freezing the skin of the animals with dry ice or with a metal instrument supercooled with dry ice and alcohol was found to produce a permanent regrowth of white hair on the skin area frozen, or, in case of lethal freezing, to leave the affected area bald. The proffered scientific explanation for the phenomena is that the pigment-producing cells of the hair bud, carrying more moisture than the cells which control hair growth but not color, are more susceptible to the formation of destructive ice crystals. Freezing to a limited degree thus has a differential effect, destroying the color-producing cells but not the hair itself, with the result that the hair resumes normal growth but without color, that is, white."

C. The Evidence

Since the case was disposed of on summary judgment, the evidence before the Court was principally documentary in form. Respondent, in practical effect, relied solely upon the Taylor article. Petitioner submitted (A-24):

> 1) An affidavit of Dr. A. Cecil Taylor, the author of the Taylor article, stating that "it never occurred to me

that living domestic animals could be satisfactorily branded with a recognizable mark using cryogenic techniques" and that such a conclusion would not have been "obvious from the information set forth in my paper." He goes on to state that he doubted that anyone seeking an improved method of branding cattle would have become aware of his paper.

2) A "Resolution of National Cattlemen" which opposes the adoption of freeze branding on the grounds of prematurity *"to the point of being dangerous to the cattle industry and its present proven methods of brand and theft prevention."* [Emphasis present.] The resolution lists the requisites of a brand as: 1) ease of application; 2) economical; 3) easily read, and 4) permanent.[2]

3) Deposition testimony of the inventor, Dr. R. Keith Farrell in which he testified that after disclosing his invention he received letters "by the thousands".

4) Affidavit of Robin I. Y. Gates who is licensed to use the Farrell invention in Great Britain. Mr. Gates spoke to the success of the process and to a contest conducted by the Milk Marketing Board of the British Ministry of Agriculture, Fisheries and Food. The Board offered £500 for a permanent, painless, readily visible and economical animal identification system. After some 3,000 ideas had been submitted (but not freeze branding) the competition was terminated with

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[2] There are many instruments and substances which may be used to mark an animal but fail to meet one or more of these criteria, e.g., knives, corrosives, abrasives, explosives and dyes. A well known marking device is a saddle or harness which over a period of time leaves a permanent mark. The Cattlemen, whose everyday concern is animal identification, undoubtedly felt that freeze branding was simply another means for making a mark on an animal which falls far short of being an effective branding method.

no award being made. The Board then commenced experimenting with freeze branding.

5) A resolution of the North Dakota Stockmen's Association which recognizes the need for a practical, inexpensive and permanent means for identifying animals and the existence of freeze branding. The resolution concludes by resolving that no technique including freeze branding "be endorsed unless it prove as practical, inexpensive and permanent as hot iron branding."

6) Affidavit of Robert L. Harmon who authenticates the documents set forth above. He further states that since the disclosure of freeze branding by Dr. Farrell, he has personally seen numerous popular articles on the process and estimates "hundreds of such articles" have been published since 1966.

Respondent submitted not one scrap of evidence to counter petitioner's evidence. It stands unrefuted.

D. Decision of Court of Appeals

The Court of Appeals decision affirmed the District Court on the premise that Dr. Farrell's new use of an old process was obvious to one of ordinary skill in the art. Implicit in that holding is the recognition that the Taylor article was completely devoid of any conceptual recognition that Taylor's experiment could be used for branding. In arriving at that conclusion the court stated (A-23):

> A full trial, for the sole purpose of hearing expert testimony on the level of skill in the art, could not have aided the court in resolving the legal question of obviousness, and the court could properly rule on that issue "without taking of testimony from experts in the pertinent area of knowledge."

The court did recite the evidence of nonobviousness submitted by plaintiff before simply dismissing it as "makeweights", relying on the *Anderson's Black Rock* v. *Pavement Salvage Company, Inc.*, 396 U.S. 57 (1969) (A-24).[3]

REASONS FOR GRANTING THE WRIT

Congress and this Court have clearly recognized the desirability of attaining uniformity between the courts in resolving issues of patent validity and obviousness. Congress in passing the 1952 Patent Act strove for stability, uniformity and definiteness. *Graham*, supra 383 U.S. at 12. The Senate and House Reports, S. Rep. No. 1979, 82nd Cong., 2d Sess. (1952); H.R. Rep. No. 1923, 82d Cong., 2d Sess. (1952), state:

> "That provision [Section 103] paraphrases language which has often been used in decisions of the courts, and the section is added to the statute for uniformity and definiteness. This section should have a stabilizing effect and minimize great departures which have appeared in some cases." H.R. Rep., supra, at 7; S.Rep., supra, at 6.

This Court in its *Graham* decision, recognizing the Congressional intent, set forth three basic factual inquiries to be utilized in resolving issues of obviousness and nonobviousness. The Court held (383 U.S. at 17),

> "Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against

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[3] It should not escape the Court's notice that in dismissing such unrefuted evidence the Seventh Circuit has clearly departed from universally accepted law that in a summary judgment proceeding the opposers' evidence is to be considered in the light most favorable to the opposing party. *United States* v. *Diebold, Inc.*, 369 U.S. 654, 655 (1962).

> the background, the obviousness or nonobviousness of the subject matter is determined."

The Court then went on to say (383 U.S. at 18),

> "We believe that strict observance of the requirements laid down here will result in that uniformity and definiteness which Congress called for in the 1952 Act."

For the next several years courts throughout the land generally observed *Graham's* "basic factual inquiries." But subsequent to this Court's decision in *Anderson's-Black Rock*, supra, there began in some Courts a substantial departure from *Graham*. It is these departures which have brought about substantial inconsistencies, not only between but within the circuits themselves. As a leading commentary[4] on patent law has observed:

> "Although data collected on holdings of validity give some rough view of a 'circuit's' attitude, the slow shifts and clearly aberrant holdings which crop up suggest it is *unrealistic to think of the 'circuit' as the meaningful unit of consistent law.* Probably, although it is not established, the common denominator of legal consistency is the panel of judges within the circuit. This would explain the aberrational holdings that keep appearing in almost all the circuits except the Eighth which is itself the aberration for it has steadfastly refused to adjudicate any patent valid, and even the occasional reversal of policy, as in the Sixth Circuit." [Emphasis added.]

This case having been decided on summary judgment brings this lack of consistency into focus. In its decision the Seventh Circuit ignores the mandate of *Graham* to determine the level of skill and then compounds the error by ignoring unrefuted evidence of nonobviousness as "make weights". The clear import of these holdings is that no matter what the evidence shows, in the eyes of the trial court and the Court of Appeals, the patent is invalid.

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[4] Dunner, Gambrell & White, Patent Law Perspectives 27 (1971).

Yet the Seventh Circuit has repeatedly relied on the same type of evidence in sustaining the validity of patents. See *National Dairy Prods. Corp.* v. *Borden Co.*, 394 F.2d 887 (7th Cir. 1968); *LaSalle Street Press, Inc.* v. *McCormick & Henderson, Inc.*, 445 F.2d 84, 93 (7th Cir. 1971); *Mercantile Nat'l Bank* v. *Quest, Inc.*, 431 F.2d 261, 266 (7th Cir. 1970).

The Seventh Circuit is not alone in the inconsistent treatment of these indicators of nonobviousness. A comparison of the decisions set forth in attached Addendum will show it prevails throughout the Circuits. The only court which seems consistent in the rulings on the consideration of the "secondary considerations" is the Court of Customs and Patent Appeals. That Court has held that they must always be considered. *In re Fielder*, 471 F.2d 640 (C.C.P.A. 1973).

These decisions show that without predictability the Courts can consider or ignore evidence of nonobviousness. Generally no explanation is given for the refusal to consider other than a statement that such evidence cannot sustain an obviously invalid patent. It is this practice of considering or ignoring evidence that is believed unparalleled in American jurisprudence. The corollary to such practice is the application of a personalized and subjective standard of invention, the very result which this Court and Congress sought to obviate through the 1952 Patent Act and *Graham*.

It would seem that the difficulty in large part stems from *Graham* itself. The very name "secondary" raises questions in the minds of some as to what role such factors should play in the determination of obviousness and nonobviousness. Neither *Graham* nor *Anderson's-Black Rock* provide any guides as to whether such "secondary considerations" may be totally ignored and if so, under what circumstances. Neither decision sheds any light on the even more fundamental question: May a trial court make a subjective determination of obviousness before deciding whether to consider the "secondary considerations".

It is to be noted that the Seventh Circuit's reasoning is totally at odds with recent decisions of other circuits on the use of summary judgment in patent cases. *Buzzelli* v. *Minnesota Mining & Mfg. Co.*, 480 F.2d 541 (6th Cir. 1973); *Tee-Pak Inc.* v. *St. Regis Paper Co.*, 491 F.2d 1193 (6th Cir. 1974), and *Indiana General Corp.* v. *Lockheed Aircraft Corp.*, 160 U.S.P.Q. 6 (9th Cir. 1968). In *Tee-Pak* the Court observed that under *Blonder-Tongue Labs., Inc.* v. *University of Illinois Foundation*, 402 U.S. 313 (1971) "The Supreme Court stressed the importance of a patentee having a full and fair opportunity to litigate the validity of his patent." In *Buzzelli* the Court adhered to the rule that in summary judgment proceedings the evidence is to be construed in the light most favorable to the opposing party. In the *Indiana General* decision the Ninth Circuit held that consideration of the reference by the Patent Office, as it was here, inherently raises a material dispute of fact.

To hold that the courts in *Tee Pak, Buzzelli* and *Indiana General* were correct in refusing summary judgment and the Seventh Circuit was incorrect does not solve the inherent problem. The question of whether a court can refuse to consider evidence of nonobviousness and apply a subjective standard exists whether the decision was rendered on summary judgment or after a trial on the merits.

Since the determination of obviousness and nonobviousness is the focal point of the vast majority of patent litigation, the consequences of this uncertainty are apparent. Litigants, both patent owners and accused, can no longer reasonably evaluate their rights under the patent laws. They simply cannot reasonably judge what facts are material to such an evaluation. Consequently, the frequency with which parties must resort to the courts for resolution of their disputes is undoubtedly materially increased. That result seems inconsistent with the goals of judicial economy and the conservation of resources of both judiciary and litigants espoused in *Blonder-Tongue*.

More importantly, the uncertainty will inevitably result in actions by inventors contrary to the interests of federal patent policy. In *Kewanee Oil Co.* v. *Bicron Corp.*, U.S. , 40 L.Ed. 2d 315 (1974) this Court sustained the right of the states to enact laws protecting trade secrets. That decision was premised on a determination that state trade secret laws did not conflict with the patent laws. The Court stated (40 L.Ed. 2d at 330) that the federal interest in disclosure is at its peak with "that invention which the owner believes to meet the standards of patentability." It was then stated that,

> "If a State, through a system of protection, were to cause a substantial risk that holders of patentable inventions would not seek patents, but rather would rely on the state protection, we would be compelled to hold that such a system could not constitutionally continue to exist."

One noted commentator on trade secrets has already taken issue with the premise that anyone who could get a patent would seek one.[5] It is his belief that the trend is away from patents, particularly in chemical processes. The trend was ascribed to the expense of patents and the harshness of treatment given them in the courts.

The state of the law is such that it is no longer possible for a patentee to form a reasonable judgment as to whether his invention may be validly patented. It is unlikely that any substantial portion of the patent owners in the numerous patent cases decided since *Graham* was insincere in their belief that their inventions were nonobvious. Yet statistics show that the vast majority of those patents were held invalid. If Mr. Milgrim is correct in his thesis that the trend is away from patents, the fault would seem not to lie

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[5] Roger Milgrim, author of R. Milgrim, Trade Secrets (1967), in a statement to the FBA-BNA Conference held on June 6-7, 1974, Washington, D.C.

with the state trade secret laws.[6] As this Court observed in *Kewanee* trade secret protection is a far weaker protection in many respects than the patent law. This, of course, assumes that the patent is a valid one. The motivation for the trend is the fact that would-be patentees realize that their chances of sustaining a patent are statistically slim. Moreover, slim or not they are unable to determine what factors should be or may be taken into account by the courts in determining obviousness and nonobviousness.

Thus we have important federal questions that lie at the very heart of the administration of the patent laws—a point at which the federal interest is at its peak. These questions must be resolved to achieve the goals sought by the Congress and this Court, i.e., stability, uniformity, and definiteness.

Petitioners respectfully pray that the Court take this opportunity to resolve these important questions.

Respectfully submitted,

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[6] The trend more likely will be accelerated by the stabilization of trade secret laws naturally flowing from the *Kewanee* decision.

ADDENDUM

Listed below are decisions from the various circuits demonstrating the inconsistent application of the so-called "secondary" indicia of non-obviousness.

The first case listed for every circuit is one in which the court either refused to consider the secondary evidence or gave it little weight in view of the "obviousness" of the invention. The second case listed is one in which the court considered the secondary evidence in finding the patent in suit to be nonobvious and valid. This list is by no means complete but rather exemplary of the inconsistencies that exist.

The decision cited from Court of Customs and Patent Appeals is one in which the court emphasizes its position that the secondary considerations must *always* be considered in connection with a determination of obviousness.

SECOND CIRCUIT

1. *Formal Fashions, Inc.* v. *Braiman Bows, Inc.*, 369 F.2d 536, 539 (2d Cir. 1966).
2. *Ling-Temco-Vought, Inc.* v. *Kollsman Instrument Corp.*, 372 F.2d 263, 269 (2d Cir. 1967).

THIRD CIRCUIT

1. *U.S. Expansion Bolt Company* v. *Jordan Industries, Inc.*, 488 F.2d 566 (3rd Cir. 1973).
2. *Jones Knitting Corporation* v. *Morgan*, 361 F.2d 451 (3rd Cir. 1966).

FOURTH CIRCUIT

1. *Long Manufacturing Co.* v. *Lilliston Implement Co.*, 328 F. Supp. 268, 287 (E.D.N.C. 1971), *affirmed*, 457 F.2d 1317 (4th Cir. 1972).
2. *Porter-Cable Machine Company* v. *Black and Decker Mfg. Co.*, 274 F. Supp. 905, 915-916 (D.Mary. 1967), *affirmed*, 402 F.2d 517 (4th Cir. 1968).

FIFTH CIRCUIT

1. *Waldon, Inc.* v. *Alexander Manufacturing Company,* 423 F.2d 91 (5th Cir. 1970).

2. *Harrington Manufacturing Co., Inc.* v. *White,* 475 F.2d 788 (5th Cir. 1973).

SIXTH CIRCUIT

1. *Kaiser Industries Corporation* v. *McLouth Steel Corp.,* 400 F.2d 36, 42 (6th Cir. 1968).

2. *Tapco Products Company* v. *Van Mark Products Corp.,* 446 F.2d 420 (6th Cir. 1971).

SEVENTH CIRCUIT

1. *Amphenol Corporation* v. *General Time Corporation,* 397 F.2d 431, 438-9 (7th Cir. 1968).

2. *Malsbury Manufacturing Company* v. *Ald, Incorporated,* 447 F.2d 809, 813 (7th Cir. 1971).

EIGHTH CIRCUIT

1. *American Indra-Red Radiant Co.* v. *Lambert Industries Inc.,* 360 F.2d 977, 989 (8th Cir. 1966).

2. *Woodstream Corporation* v. *Herter's, Inc.,* 446 F.2d 1143, 1154, 1157 (8th Cir. 1971).

NINTH CIRCUIT

1. *Hewlett-Packard Company* v. *Tel-Design, Inc.,* 460 F.2d 625 (9th Cir. 1972).

2. *Esco Corporation* v. *Hensley Equipment Company,* 265 F. Supp. 863, 873 (D.C.Cal. 1965), aff'd, 375 F.2d 432 (9th Cir. 1967).

COURT OF APPEALS FOR
THE DISTRICT OF COLUMBIA

1. *Pollack* v. *Ladd*, 346 F.2d 799, 800 (C.A.D.C. 1965).

2. *Higley* v. *Brenner*, 387 F.2d 855, 860 (C.A.D.C. 1967).

C.C.P.A.

1. *In re Fielder*, 471 F.2d 640 (C.C.P.A. 1973).

APPENDIX

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

RESEARCH CORPORATION, Plaintiff, v. NASCO INDUSTRIES, INC., Defendant.	OPINION AND ORDER 68-C-183

This is an action for infringement of Patent No. 3,362,381. Defendant has moved for summary judgment on two grounds: that the patent in suit is invalid, and that there has been no infringement of any of the claims of the patent. In its brief in opposition, plaintiff has requested that summary judgment in its favor be granted.

I find that there is no genuine issue with respect to the material facts which appear hereinafter under the heading "Facts".

FACTS

Plaintiff is a corporation organized under the laws of New York with its principal place of business in New York. Plaintiff is the assignee of the inventor Dr. Roy Farrell and is the owner of Patent No. 3,362,381, entitled "Cryogenic Branding of Animals," the patent in suit.

Defendant is a corporation organized under the laws of Wisconsin with an established place of business within this judicial district. The acts of alleged infringement were committed within this judicial district. Defendant sells and advertises among other things a line of "freeze branders" for use in branding of living animals. Defendant has sold such freeze branders since the issuance of the patent in suit and continues to offer such freeze branders for sale. These freeze branders kill pigment producing cells of the hair matrix to produce white hair in all succeeding generations of hair.

The patent in suit provides a method of marking living domesticated animals by applying a super-chilled material, in the shape of the desired brand, to the skin of the animal. Such application usually results in the growth of white hair in the shape of the branding instrument as well as depigmentation of the skin.

Farrell first attempted to mark a living animal by using extreme cold in 1954. His second experiment took place on or about May 5, 1965. He filed his initial application for Letters Patent on March 15, 1966. This application was abandoned in favor of a second application filed March 24, 1967, which ultimately resulted in issuance of the patent in suit.

On September 6, 1967, the Patent Office issued a Notice of Allowance on the second application, signifying that the application was in condition for a patent to issue. At that time, claim 1 of the application read as follows:

> "1. A method of permanently altering the appearance of selected portions of the hair and skin of living animals which comprises applying in a predetermined configuration to the *selected normal portion* of the skin of the animal a super-cooled material for a sufficient time to freeze such selected portion." (emphasis supplied)

On October 13, 1967, Farrell filed an "Amendment under Rule 312" replacing claim 1 of the application. In remarks submitted to the Patent Office accompanying the amendment, the attorney for Farrell stated:

> Claim 1 has been rewritten as new claim 9 to distinguish the invention more clearly from the scientific investigation of the effect of freezing on the skins of rats reported in an article by A. Cecil Taylor entitled "Survival of Rat Skin and Changes in Hair Pigmentation Following Freezing" in *Journal of Experimental Zoology* (1949), pages 77-113. A copy of the article is filed herewith for the convenience of the Examiner.

Claim 9 includes all of the limitations of allowed claim 1 with the added explicit limitation to the *branding of domesticated animals.*

The new claim 9 then submitted read as follows:

> A method of permanently branding living *domesticated animals* which comprises applying in a predetermined configuration representing insignia to *a selected portion of the skin* of the animal a supercooled material for a sufficient time to freeze such selected portion and permanently alter the appearance thereof. (emphasis supplied)

Following a telephone conference with applicant's attorney, the Patent Office Examiner further amended this claim to the form in which it issued as claim 1 of the patent:

> 1. A method of permanently branding living domesticated animals which comprises applying in a predetermined configuration representing insignia to a selected portion of the living animal, said selected portion having *normal length hair and normal skin,* a supercooled material for a sufficient time to freeze such selected portion and permanently alter the appearance thereof. (emphasis supplied)

The other claims of the patent are set out in the margin.[1]

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[1] 2. A method as defined in claim 1 wherein the hair pigmentation of the selected portion of the skin is altered.

3. A method as defined in claim 1 wherein the hair on the selected portion is at least temporarily eliminated.

4. A method as defined in claim 1 in which the supercooled material is a refrigerant.

5. A method as defined in claim 1 in which the supercooled material is a branding iron.

6. An animal hide having at least one selected portion of altered appearance produced by the method of claim 1.

7. An animal hide having at least one selected portion of reduced pigmentation produced by the method of claim 1.

8. An animal hide having at least one selected hairless portion produced by the method of claim 1.

The specification of the patent includes the following recommendation: "For greater uniformity of results, clipping of the hair at the area of application is recommended." The specification also suggests the following methods of preparing and applying supercooled materials:

> In general, in accordance with the method of the invention, the marking, or branding, is accomplished by the direct application of a superchilled material, in the shape of the desired identification mark, to the skin of the animal. This may be carried out by a variety of techniques including the application to the skin surface of a superchilled metal brand, of solid CO_2 (Dry Ice) supercooled refrigerant, of cold CO_2 gas, and by the volatilization of butane or other liquid petroleum products or any of the common fluorocarbon refrigerants, or liquid nitrogen on the skin surface. The material employed has little effect on the outcome if the skin is adequately frozen. Refrigerants or refrigerated metals at temperatures as high as about –30° C. are effective in carrying out the method of the invention.
>
> Solid refrigerants, such as Dry Ice, may be applied to the skin in the firm preformed shapes while liquid or gaseous refrigerant materials may be applied with applications having suitably arranged outlet apertures to direct the refrigerant material into contact with the skin in the desired shape or pattern.

Among the references listed in the patent is "A. Cecil Taylor, Journal of Experimental Zoology (1949), 'Survival of Rat Skin and Changes in Hair Pigmentation Following Freezing,' pp. 77-111." (hereinafter referred to as the "Taylor article").

The Taylor article describes the experiments performed by Dr. Taylor in freezing rat skin prior to 1949 as follows:

> The animals used were black and hooded rats of the Long-Evans strain and albino rats from Wistar stock.

They ranged in age from 20 to 90 days. The animals were anesthetized with nembutal and the hair was removed from the backs and flanks. Freezing was done by direct application of solid carbon dioxide (CO_2) or by means of a special device described below.

When the solid CO_2 was used, it was applied to the intact skin or to the skin after insertion of a tongue depressor between it and the underlying muscle to serve as heat insulation from the deeper tissues.

The solid CO_2 used for freezing was shaped into a cylindrical pencil 10 mm in diameter, one end of which was held against the skin with enough pressure to insure firm contact. The duration of contact ranged from ½ to 120 seconds. After the longer periods, the area of congealed skin extended beyond the edge of the contact surface of the CO_2 pencil, so that the size of the frozen area was larger than the diameter of the pencil.

Results of the freezing directly with solid CO_2 suggested the use of a cooling device capable of maintaining a controlled temperature near the freezing point of the tissue. For this purpose a hollow disk-shaped chamber was constructed through which alcohol, chilled to the desired temperature, could be circulated by means of connecting rubber tubes. A pair of these chambers was applied to the skin so as to chill the outer and inner surfaces simultaneously, or one alone was used applied to either skin surface. Readings of the actual temperature of the skin were made continuously by means of a thermocouple held against the skin or inserted into it.

This report is based upon 77 areas of skin on 31 rats. Forty-four areas were frozen by contact with Solid CO_2 and 27 were frozen with the liquid cooler. The remaining few cases were cooled by contact with metal chilled by other means.

> Areas of skin which had been frozen in situ at the various temperatures and for the durations of contact used in the experiments were fixed for histological study after periods ranging from 4 hours to 60 days post-freeze. Histological preparations were also made of normal skin taken at different stages in the hair cycle from albino rats and from the black and white areas of hooded rats as well as from all black animals. All tissues were fixed in Bouin's fluid and sections were stained with hematoxylin and eosin or with Mallory's Azo-Carmin.

Dr. Taylor concluded that white hair would grow following non-lethal supercooling of the skin because of the destruction of melanophores or color producing cells. He further discovered that:

> Skin induced by freezing to produce white hairs will continue to produce white hairs in all subsequent hair generations. In other words, the destruction of the melanophores in a given hair bulb insures the production of a white hair not only from the frozen bulb itself but from all descendants of that bulb. This leads to two important conclusions regarding hair pigmentation in the rat: (1) that the chromatophores of each generation of buds (sic) are derived solely from the parent hair bulbs and (2) that chromatophores are not free to migrate from one hair bulb to another.
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> • • •
>
> This suggests that the differentiation of new hair germs may depend upon some inductive action of the underlying dermis. It is by this process that hairless areas of skin which have regenerated after lethal freezing may eventually be repopulated with hair. Because no chromatophores are present in the epidermis, such hair will of course be white.
>
> The production of white hair by differentiation of new follicles is a slow process usually requiring several

months to sparsely cover the frozen area, and should be distinguished from the growth of white hairs after freezing at higher temperatures where only the chromatophores have been destroyed. In the latter case the hair cycle is not much interrupted.

Summarizing his experiments, Dr. Taylor wrote:

Areas of skin on black rats were cooled or frozen in situ by contact with solid carbon dioxide or by using a special cooling device.

Cooling to –10° C., without formation of ice crystals has no subsequent observable effect on the skin or hair. Skin will survive rapid freezing by contact with solid CO_2 for 5 seconds or slower freezing to a temperature of –10° C. Hair growing from areas thus treated lacks pigmentation.

Freezing by CO_2 contact for 10 seconds or more or by slower cooling to temperatures lower than –20° C., kills the skin which then forms an eschar and is sloughed. Skin regenerated over such an area may also produce some white hair.

Events in the development of melanin pigmentation in the hairs of normal black rats and the effects of nonlethal freezing upon this process were studied in histological preparations. The following observations were made:

• • •

2. Melanophores are not newly differentiated for each new generation of hair buds but are derived from resting melanophores which had once been active in the bulbs of the parent generation of hairs.

3. In skin which survives freezing the melanophores are selectively killed. Since areas thus treated will produce white hair in all succeeding generations, it is apparent that melanophores are not free to migrate from one hair bulb to another.

4. The non-pigment forming cells of the hair matrix are capable of producing a hair of normal shape and texture in the absence of melanophores. This may occur experimentally after freezing or normally in the white areas of hooded rats.

5. Regenerating epidermis may contribute cells to the matrix of a new hair bud and thus help to determine the form, but not the color, of the hair it will produce.

Others describing Taylor's work or performing similar experiments subsequent to Taylor's article are as follows:

1) Herman B. Chase and Harold Rauch, "Greying of Hair. II. Response to Individual Hairs in Mice to Variations in X-Radiation."

2) George R. Mikhail, "Hair Neogenesis in Rat Skin", Archives of *Dermatology.* (1963)

(This list is not intended to be exhaustive.)

Defendant advertises and sells freeze branders intending that they be used by the purchasers for the purpose of permanently branding living domesticated animals. The method employed in the use of defendant's freeze branders is applying in a predetermined configuration representing insignia to a selected portion of a living animal a supercooled material, namely, a branding iron, for a sufficient time to freeze such selected portion and permanently alter the appearance thereof. The method employed in the use of the defendant's freeze branders results in the alteration of the hair pigmentation of the selected portion of the skin and in the temporary elimination of the hair on said portion. Defendant's sales have occurred after it had knowledge of the issuance of the patent in suit. Defendant actively induces its customers to use its freeze branders in order to practise the method of branding described in this paragraph. Defendant itself practised the said method in a

demonstration of its freeze branders. The hides of animals upon which defendant's freeze branders have been used to practise the method described in this paragraph are animal hides having at least one selected portion of altered appearance produced by the said method, and are animal hides having at least one selected portion of reduced pigmentation produced by the said method, and are animal hides which may have at least one selected hairless portion produced by the said method.

In its advertising, instructions, and demonstrations, defendant explicitly states that hair clippers are absolutely necessary for the type of branding to be accomplished with its freeze-branders, and that from the selected portion of the skin of the animal the hair is to be clipped as closely as possible.

OPINION

Jurisdiction is present and venue is proper. 28 U.S.C. §§ 1338(a), 1400(b).

Plaintiff alleges that the use of freeze branders sold by the defendant for cryogenic branding of living domesticated animals constitutes a direct infringement of the patent in suit under 35 U.S.C. § 271(a); that defendant's activity in knowingly marketing freeze branders for such use constitutes active inducement of infringement under § 271(b); and that defendant's sale of freeze branders constitutes contributory infringement under § 271(c).

Is the patent in suit valid?

Infringement occurs only when a party trespasses upon the valid patent property rights of the patentee. *A. Deller, 7 Deller's Walker on Patents* § 588 (2nd Ed. 1972) [hereinafter referred to as *"Deller, Patents"*]. An invalid patent cannot be infringed. *Pambello* v. *Hamilton Cosco, Inc.*, 377 F.2d 445, 660 (7th Cir. 1967); *Leach* v. *Rockwood & Company*, 273 F. Supp. 779, 792 (W.D. Wis. 1967), *aff'd* 404 F.2d 652.

Defendant first urges that plaintiff's patent is invalid under 35 U.S.C. § 102, particularly relying upon § 102(b), which provides in part:

> A person shall be entitled to a patent unless—
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> • • • •
>
> (b) the invention was . . . described in a printed publication in this or a foreign country . . . more than one year prior to the date of application for patent in the United States . . . . 35 U.S.C. § 102(b).

The prior publication principally relied upon by defendant is the Taylor article. This article is a "printed publication" within the meaning of the Act, see *Deller, Patents* § 60 *at* 273-77, and was published more than one year prior to the application date for the patent in suit. The question is whether the Taylor article is sufficient to negate plaintiff's claim to inventiveness:

> A prior printed publication to defeat a patent must describe the invention in such full, clear and exact terms as to enable any person skilled in the art to which it relates to practice the invention. Such description must exhibit a substantial representation of the patented invention. It must be in such full, clear and exact terms as to enable one skilled in the art to practice the patented improvement without the exercise of inventive skill of his own and without assistance from the patent claimed to have been anticipated.
>
> The description in the prior printed publication is to be read in the light of the knowledge possessed by persons skilled in the art to which the invention relates. Essential elements cannot be read into the description, nor can information which it does not give. To anticipate, the description need not disclose the invention in the exact terms of the patent; it is sufficient if the same inventive concept is found in both. The prior description must disclose clearly, truly and fully what the sub-

sequent patentee invented and accomplished. *Deller, Patents* § 60 *at* 277-78.

The determination whether a process is a "patentable invention" or has been anticipated by a prior publication is often difficult and to some extent subjective. As stated by Judge Learned Hand:

> Objective tests may be of value vaguely to give us a sense of direction, but the final destination can be only loosely indicated. An invention is a new display of ingenuity beyond the compass of the routineer, and in the end that is all that can be said about it. Courts cannot avoid the duty of divining as best they can what the day to day capacity of the ordinary artisan will produce. This they attempt by looking at the history of the art, the occasion for the invention, its success, its independent repetition at about the same time, and the state of the underlying art, which was a condition upon its appearance at all. Yet, when all is said, there will remain cases when we can only fall back upon such good sense as we may have, and in these we cannot help exposing the inventor to the hazard inherent in hypostatizing such modifications in the existing arts as are within the limited imagination of the journeyman. There comes a point when the question must be resolved by a subjective opinion as to what seems an easy step and what does not. We must try to correct our standard by such objective references as we can, but in the end the judgment will appear, and no doubt be, to a large extent personal, and in that sense arbitrary. *Kirsch Manufacturing Co.* v. *Gould Mersereau Co.*, 6 F.2d 793, 794 (2nd Cir. 1925).

The defendant who assails the validity of the patent in suit upon its face bears a heavy burden of persuasion to overcome the statutory presumption that patents are valid. 35 U.S.C. § 282. *Walt Disney Prods.* v. *Fred A. Niles Com-*

munications Center, Inc., 369 F.2d 230, 234 (7th Cir. 1966); *Leach, supra at* 785-786; *Deller, Patents* § 81. Where, as here, pertinent prior art references have been considered by the Patent Office, but the patent is nonetheless allowed, the presumption of validity is strengthened. *Industries, Inc.* v. *International Harvester Co.*, 406 F.2d 53, 57 (7th Cir. 1968). Nonetheless, this presumption may be rebutted. *Decca Limited* v. *United States*, 420 F.2d 1010, 1027 (Ct. Cl. 1970), *cert. den.* 400 U.S. 865.

Analysis under 35 U.S.C. § 102 is more limited than under § 103; the question is whether a virtually identical invention has been previously disclosed. *Illinois Tool Works, Inc.* v. *Continental Can Co.*, 273 F. Supp. 94, 105 (N.D. Ill. 1967) *aff'd* 397 F.2d 517 (7th Cir. 1968). Although often expert testimony is necessary to aid the court in determining whether there is a difference between two inventions and to determine the nature of improvements, if any, over prior art, in the instant case, where the processes are virtually identical and are relatively simple, such aid is not necessary and summary judgment is appropriate. *See AR Inc.* v. *Electro-Voice Incorporated*, 311 F.2d 508, 511 (7th Cir. 1962); *Technograph Printed Circuits Ltd.* v. *Methode Elect. Inc.*, 356 F.2d 442, 448 (7th Cir. 1966), *cert. den.* 384 U.S. 950.

I conclude that here the defendant has satisfied its heavy burden. The Taylor article anticipates each of the elements of the claims of plaintiff's patent. Taylor's experimental process and plaintiff's invention satisfy the doctrine of equivalents: they perform substantially the same function in substantially the same way and produce substantially the same result. *Delta Manufacturing Company* v. *E. L. Essley Machinery Company*, 153 F.2d 905, 906-907 (7th Cir. 1946) *cert. den.* 238 U.S. 867.

Defendant also contends that plaintiff's patent is invalid under 35 U.S.C. § 103, which provides in part:

> A patent may be obtained though the invention is not identically disclosed or described as set forth in section

> 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious, at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

I focus on Taylor's article as illustrative of "prior art" which must be considered. An article in the *Journal of Experimental Zoology*, entitled "Survival of Rat Skin and Changes in Hair Pigmentation Following Freezing", is not "so remote" that students of the art of animal branding "would not naturally have looked there for assistance." *B & M Corp.* v. *Koolvent Aluminum Awning Corp. of Indiana*, 257 F.2d 264, 266-67 (7th Cir. 1958); *Leach, supra at* 788. Given this relevant prior art at the time of plaintiff's invention in 1954, I must ask whether one having ordinary skill in the art would find the claimed invention obvious. The inventor is presumed to know all prior art references. *Leach, supra at* 789. Although recognizing that in retrospect solutions to difficult problems may appear simple, I must conclude that none of the claims of the patent satisfy the nonobviousness requirement of 35 U.S.C. § 103. See *Leach, supra at* 789.

Prior art establishes the destruction of melanocytes by the application of extreme cold to clipped rat skin.[1] Prior art establishes the resultant growth of white hair and in some cases the loss of hair at the point of application, forming a mark in the shape of the applicator. At the most, plaintiff suggested the use of the mark for identification of domestic animals. I conclude that the use of a mark in this

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[1] Taylor's experiment was conducted by applying supercooled liquid either under the rat's skin or on the surface of clipped skin. However, his conclusions were not expressly limited to applications to clipped skin.

manner is obvious.[2] As stated by the Supreme Court, in holding invalid the patent of an invention which the Court characterized as "the application of an old process to a new and analogous use":

> He who is merely the first to utilize the existing fund of public knowledge for new and obvious purposes must be satisfied with whatever fame, personal satisfaction or common success he may be able to achieve. Patent monopolies, with all their significant economic and social consequences, are not reserved for those who contribute so insubstantially to that fund of public knowledge. *Dow Co.* v. *Halliburton Co.*, 324 U.S. 321, 327-28.

I conclude that Patent No. 3,362,381 is invalid under 35 U.S.C. § 102, or in the alternative under 35 U.S.C. § 103, and that consequently it was not infringed by defendant.

Assuming the validity of the patent, was it infringed?

Even assuming that the patent in suit is valid, the defendant contends it has neither actively induced infringement nor engaged in activities constituting contributory infringement. Defendant emphasizes that claim 1 of the patent in suit was amended by plaintiff and the Patent Office Examiner, narrowing its scope from freeze branding of a "normal portion of the skin" to freeze branding of "a portion of [a] living animal, said selected portion having normal length hair and normal skin." Defendant urges that because plaintiff's patent is so limited and since defendant

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[2] What is "obvious" and "novel" may involve difficult factual and legal questions. Plaintiff has submitted the affidavit of Dr. Taylor averring that the process embodied in the patent in suit was not obvious to him prior to 1968. Although this fact is not in itself disputed, it does not persuade me that the claims of the patent constitute a nonobvious patentable invention in light of the substance of Dr. Taylor's article.

recommends the application of freeze branding to clipped hair only, defendant's operations are beyond the scope of the patent in suit.

Plaintiff contends that claim 3 covers the application of freeze branding to clipped hair. Claims 2 and 3 provide as follows:

> 2. A method as defined in claim 1 wherein the hair pigmentation of the selected portion of the skin is altered.
>
> 3. A method as defined in claim 1 wherein the hair on the selected portion is at least temporarily eliminated.

I conclude that each of these claims refers to the process described in claim 1, and that the references to the alteration of pigmentation of hair (claim 2) and to the temporary elimination of hair (claim 3) are references to end products of the freeze branding process, and not, as plaintiff contends, references to alterations in the condition of the portion of the skin prior to freeze branding.

The construction of claim 1 is therefore crucial to the decision on infringement. This construction in turn depends partly upon the proper weight to be given to the specification recommending clipped hair. Plaintiff cites *United States* v. *Adams*, 383 U.S. 39, 49 (1966), for the proposition that claims must be construed in light of the specifications. But in that case, the Court turned to specifications only to ascertain the composition of a necessary element of the invention which was not mentioned in any of the claims. *Id.* Moreover, the Court stated in dicta that "the claims of a patent limit the invention, and specifications cannot be utilized to expand the patent monopoly. *Burns* v. *Meyer*, 100 U.S. 671, 672 (1880); *McCarty* v. *Lehigh Valley R. Co.*, 160 U.S. 110, 116 (1895) . . ." *Id. at* 48-49. Absent ambiguity or other unusual circumstances, it is the claim of the patent which measures the invention. *See Deller, Patents* § 509. Important policies, recognized by Congress in drafting pat-

ent legislation, require enforcement of patents according to the specific terms of the claims:

> The limits of a patent must be known for the protection of the patentee, the encouragement of the inventive genius of others and the assurance that the subject of the patent will be dedicated ultimately to the public. The statute [requiring specification of claims with particularity] seeks to guard against unreasonable advantages to the patentee and disadvantages to others arising from uncertainty as to their rights. The inventor 'must inform the public during the life of the patent of the limits of the monopoly asserted, so that it may be known which features may be safely used or manufactured without a license and which may not." The claims 'measure the invention.' *General Electric Company* v. *Wabash Corporation,* 304 U.S. 364, 369 (1938).

Furthermore, it is well-established that where the inventor accepts a patent claiming only part of the invention described in the specification, he abandons the unclaimed remainder to the public. *Deering* v. *Winona Harvestor Works,* 155 U.S. 286, 296 (1894); *Deller, Patents* § 509 *at* 168. Finally, I note that in construing a patent, an amendment of a claim must be viewed with significance. *See Graham* v. *John Deere Co.,* 383 U.S. 1, 33 (1966). Whatever the motivation underlying the insertion of the phrase "normal length hair", the phrase has a limiting effect. The limitation excludes freeze-branding of a portion of a living animal, which portion has hair clipped shorter than its normal length.

However, it has also been held that one may not avoid liability for infringement by making a merely colorable change in a patented process while retaining the principle and substance of the patented invention. *See Deller, Patents* §§ 536, 539, 548, 565-570. Here, the defendant's improvement of the patented process, by merely following the plain-

tiff's unclaimed recommendation of freeze branding clipped hair, appears to be no more than a colorable change. But the limiting language of claim 1 is unambiguous and the history of insertion of this language by amendment is starkly delineated. I conclude that here the policies underlying strict limitation of the patent's protection to the terms of its claims outweigh any policy of prosecuting persons whose activities closely skirt the border separating protected from nonprotected processes.[1] Therefore, I hold that even if the patent in suit were valid, defendant did not infringe plaintiff's patent rights.

Accordingly, on the basis of the entire record herein and for the reasons stated above, IT IS HEREBY ORDERED that defendant's motion is granted, and judgment may ' entered dismissing this action on its merits.

Entered this 9th day of January, 1973.

BY THE COURT:

.....
James E. Doyle
District Judge

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[1] It is not inconsistent to attach such significance to hair length here while not similarly limiting the effect of Taylor's article to the application of freeze branding to clipped hair. *See* p. 16 *supra*. First, more care and specificity may be expected in the drafting of a patent claim, than in conclusions stated in a scientific article. Second, ignoring hairlength in interpreting the patent claim will expand a private monopoly while ignoring hairlength in reading Taylor's article broadens the store of public knowledge which may not be the subject of private monopoly.

IN THE
UNITED STATES COURT OF APPEALS
FOR THE SEVENTH CIRCUIT

September Term, 1973 — January Session, 1974

No. 73-1229

Research Corporation,
Plaintiff-Appellant,

v.

NASCO Industries, Inc.
Defendant-Appellee.

Appeal from the United States District Court for the Western District of Wisconsin.
Honorable James E. Doyle, *District Judge.*

Argued January 24, 1974—Decided June 21, 1974

Before Kiley, *Senior Circuit Judge,* Cummings, *Circuit Judge,* and Hoffman, *Senior District Judge.**

Hoffman, *Senior District Judge.* The plaintiff, assignee of United States Patent No. 3,362,381, has appealed from summary judgment entered against it in a suit for infringement. We agree with the District Court that the patent is invalid, and affirm.

The patent in suit, issued to Dr. Roy Farrell on January 9, 1968, is entitled "Cryogenic Branding of Animals", and describes a method of branding by freezing the skin of the animal. The first and principal claim asserts invention of:

> "1. A method of permanently branding living domesticated animals which comprises applying in a predetermined configuration representing insignia to a

* Senior District Judge Julius J. Hoffman of the Northern District of Illinois is sitting by designation.

selected portion of the living animal, said selected portion having normal hair length and normal skin, a super-cooled material for a sufficient time to freeze such selected portion and permanently alter the appearance thereof."

The specifications and examples state that the application of a supercooled material, such as dry ice or a metal instrument chilled with dry ice and alcohol or in liquid nitrogen, held in contact with the animal's skin, will cause a temporary loss of hair, followed by a regrowth of white hair in the area frozen, or by a permanent loss of hair if the application of cold is carried to the point of destruction of the hair follicles. The regrowth of white hair is particularly effective for marking animals with dark hair. Examples to illustrate the claimed invention recount the marking of two dogs, a cat, and a cow.

The prior art references noted on the file wrapper include an article by Dr. A. Cecil Taylor published in the *Journal of Experimental Zoology,* Vol. 110, p. 77 (1949), entitled "Survival of Rat Skin and Changes in Hair Pigmentation Following Freezing". The article describes in detail a series of experiments with laboratory rats. Freezing the skin of the animals with dry ice or with a metal instrument supercooled with dry ice and alcohol was found to produce a permanent regrowth of white hair on the skin area frozen, or, in case of lethal freezing, to leave the affected area bald. The proffered scientific explanation for the phenomena is that the pigment-producing cells of the hair bud, carrying more moisture than the cells which control hair growth but not color, are more susceptible to the formation of destructive ice crystals. Freezing to a limited degree thus has a differential effect, destroying the color-producing cells but not the hair itself, with the result that the hair resumes normal growth but without color, that is, white.

Taylor thus discloses a method for turning the hair of living animals white, in defined and limited areas where

the skin is frozen by contact with a supercooled material. This article, published some fifteen years before the plaintiff's patent was applied for, raises the defense of anticipation, denying patentability if "the invention was . . . described in a printed publication . . . more than one year prior to the date of the application for patent. . . ." 35 U.S.C. § 102(b). On this ground, the District Court concluded that the patent was invalid.

The plaintiff contends, however, that the Taylor article does not disclose the use of this method for the purpose of *branding*. Dr. Taylor was concerned with discovering the biological principles at work, and not with the commercial use of his method. His article does not consider the application of his research as a means of marking animals for identification, nor for esthetic purposes. Nonetheless, his writings teach that freezing by contact with a chilled instrument can be used to produce a mark consisting of a growth of white hair in the shape of the applicator.

While it is clear that a process may be patentable even though it is the "new use of a known process" (35 U.S.C. § 100(b)), it is not enough merely to find the latent qualities in an old discovery and adapt it to a useful end, even if others had failed to detect it. *General Electric Co.* v. *Jewel Co.*, 326 U.S. 242, 249 (1946). Without more, " 'the application of an old process to a new and analogous purpose does not involve invention, even if the new result had not before been contemplated' " 326 U.S., at 247; *General Radio Co.* v. *Superior Electric Co.*, 321 F.2d 857, 862 (3 Cir. 1963), *cert. denied* 376 U.S. 938 (1964). "That those who preceded the patentees failed to perceive all the uses to which their [disclosure] was accomodable does not minimize the effect of their disclosures or enhance the claim to patentability." *Gould-National Batteries, Inc.*, v. *Gulton Industries, Inc.*, 361 F.2d 912, 914 (3 Cir. 1966).

Whether a different use for a known process is merely analogous and cognate, and thus not "new", is a question

which merges in the decisional process with the question of obviousness. "The application of an old principle to a new use will not gain a patent unless the new use would not have been obvious at that time to a person of ordinary skill in the subject matter art." *Skirow* v. *Roberts Colonial House, Inc.*, 361 F.2d 388, 390 (7 Cir. 1966). It is not enough that the plaintiff "has merely adapted an old method to a new use by modifications obvious to one skilled in the art, which does not constitute a patentable invention." *Scott Paper Co.* v. *Fort Howard Paper Co.*, 432 F.2d 1198, 1203 (7 Cir. 1970). See also *Grinnell Corp.* v. *Virginia Electric & Power Co.*, 401 F.2d 451, 453 (4 Cir. 1968); *Preuss* v. *General Electric Co.*, 392 F.2d 29 (2 Cir. 1968).

The fact that the Taylor article does not directly describe the end of branding, to qualify as full and absolute anticipation, does not suffice to validate the plaintiff's patent. Under Section 103, a patent is invalid even "though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. 35 U.S.C. §103. We agree with the District Court that the use of Taylor's method for purposes of marking an animal for identification would have been obvious from his published article.

The plaintiff argues, however, that a decision of the question of obviousness cannot be made upon a motion for summary judgment. A patent, duly issued by the Patent Office, enjoys a presumption of validity, and that presumption is reinforced when the prior art was cited and considered by the Patent Examiner. See *Schnell* v. *Allbright-Nell Co.*, 348 F.2d 444 (7 Cir. 1965), *cert. denied* 383 U.S. 934 (1966). But the presumption is not factual, requiring the introduction of evidence in every case to overcome it. The "ultimate question of patent validity is one of law . . . ." *Graham* v.

John Deere Co., 383 U.S. 1, 17 (1965). The legal question of obviousness "lends itself to several factual inquiries. Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined." 383 U.S., at 17.

Once these factual inquiries have been made, the question is a pure issue of law. As stated in *Erie Technological Products, Inc.* v. *Die Craft Metal Products, Inc.*, 461 F.2d 5, 9 (7 Cir. 1972):

> "Of course the patent office must have decided that the subject matter would not have been obvious, and issuance of the patent creates a presumption in its favor. We are to be on guard against deciding that the subject matter of any patent would have been obvious because it has become obvious by hindsight. Although we should, and do, carefully consider the conclusion reached by the district court, the ultimate issue of obviousness under 35 U.S.C. §103, after it has been refined by performing the steps required by *Graham* v. *John Deere Co.*, is one of law."

There is nothing in Rule 56 to forbid the use of summary judgment procedures to determine whether a genuine issue of fact exists, concerning the factual foundation for determination of the ultimate issue of law: obviousness. Although care must be exercised to assure that controverted fact issues are not ignored, see *Tee-Pak, Inc.* v. *St. Regis Paper Co.*, 491 F.2d 1193 (6 Cir. 1974), ". . . a suit concerning the validity of a patent over the prior art is not immune from disposition on motion for summary judgment even though, in addition to prior art patents, deposition testimony of the applicant and affidavits are involved, if no genuine issue of material fact is present." *A R, Inc.*, v. *Electro-Voice, Inc.*, 311 F.2d 508, 511 (7 Cir. 1962). "Further, it is well settled

that, in a proper case, the validity of a patent may be determined by use of summary judgment." *Technograph Printed Circuits, Ltd.* v. *Methode Electronics, Inc.*, 356 F.2d 442, 446 (7 Cir. 1966), *cert. denied* 384 U.S. 950 (1966).

Here there was no factual dispute concerning the state of the prior art, as recorded in the Taylor article. The differences between the method there disclosed and the claimed invention are plainly discernible from the documents, and involve principally the shape of the area of skin upon which the supercooled material is applied to turn the hair white. The plaintiff improves upon the Taylor method only by altering the hair color in a predetermined configuration, rather than in the fortuitous shape of the supercooled material applied for purposes of research rather than identification. Under such circumstances, the District Judge correctly concluded that no genuine issue of fact remained. A full trial, for the sole purpose of hearing expert testimony on the level of ordinary skill in the art, could not have aided the court in resolving the legal question of obviousness, and the court could properly rule on that issue "without taking of testimony from experts in the pertinent area of knowledge." *Monoplastics, Inc.* v. *Caldor, Inc.*, 378 F.2d 20, 21 (2 Cir. 1967); *Trico Products Corp.* v. *Roberk Company*, 490 F.2d 1280, 1281-82 (2 Cir. 1973). "Rule 56 applies to patent cases and is used in those instances where the structure and mode of operation of the accused device may be readily comprehended by the court and compared with the invention described and claimed in the patent without need of technical explanation by expert witnesses." *Technograph Printed Circuits, Ltd.* v. *Methode Electronics, Inc.*, 356 F.2d 442, 447 (7 Cir. 1966), *cert. denied* 384 U.S. 950 (1966).

In opposition to the motion, the plaintiff presented a declaration prepared in support of the plaintiff's application for a British patent, signed by Dr. Taylor, stating that it did not occur to him, from the work described in his article, that his methods could be employed for branding, and stating his belief that such a use would not have been obvious.

The District Court concluded that this evidence raised no genuine issue of fact, and could not salvage the patent. The Supreme Court reached a similar conclusion in *Anderson's-Black Rock, Inc.* v. *Pavement Salvage Co.*, 406 U.S. 57 (1969), where the Court held the patent invalid as a matter of law despite the evidence of two expert witnesses that they had not believed the claimed invention would work. The plaintiff also offered affidavits tending to show a need for an improved method of branding, to eliminate the disadvantages of hot branding; the failure to find such a means, in a British contest with 3,000 entries; the commercial success of freeze branding, as revealed by numerous inquiries and licenses; and skepticism, as evidenced by resolutions adopted by two cattlemen's associations, recording their doubts about the permanence, economy, and practicality of the method. These factors are useful makeweights in doubtful cases, and may tip the scales when otherwise evenly balanced. They serve to induce a becoming intellectual modesty on the part of the judiciary, and to limit the temptation to judicial hindsight, all as discussed in *Graham* v. *John Deere Co.*, 383 U.S. 1, 35-37 (1965). But such evidence did not in that case deter the Supreme Court from concluding that the claimed invention was obvious as a matter of law, and the patent invalid. A failure to consider such secondary factors, in the face of the evident lack of difference, would not constitute reversible error. *Scott Paper Co.* v. *Fort Howard Paper Co.*, 432 F.2d 1198, 1203-04 (7 Cir. 1970). Here the evidence was presented and considered, albeit in documentary form. Since much of it was inherently documentary, there is no reason to suppose that the evidence would have a different impact if it were presented in a trial rather than in summary judgment proceedings. The District Judge afforded the plaintiff every opportunity to meet its burden in opposing the motion under Rule 56(e), even to the extent of allowing an additional affidavit to be filed long after the motion had been taken under advisement.

We agree with the court below in its conclusion that no genuine issue of material fact is presented, and that the defendant is entitled to judgment as a matter of law, under Rule 56. Giving full credence to the plaintiff's factual assertions, there remains the implacable and undisputed fact that the plaintiff has added nothing to the Taylor disclosures beyond recognizing that the resultant markings could be made in a pattern or design, useful for identification. While this application of the disclosed method may avoid the strict defense of anticipation under §102, it was nonetheless obvious within the meaning of §103, and the District Court did not err in adjudging the patent to be invalid.

Our affirmance on the ground of invalidity makes it unnecessary to consider the alternative ground of the judgment below: that the defendant has avoided infringement by confining freeze branding to skin from which the hair has first been removed by clipping. For purposes of further appeal, it is enough to record our doubt concerning the District Court's narrow interpretation of the claim, in light of the mentions of pre-clipping, both in the patent specifications and examples, without resolving that doubt.

AFFIRMED.

A true Copy:

Teste:

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Clerk of the United States Court of Appeals for the Seventh Circuit.

IN THE UNITED STATES COURT OF APPEALS

For the Seventh Circuit

Chicago, Illinois 60604

July 31, 1974

Before

Hon. ROGER J. KILEY, Senior Circuit Judge

Hon. WALTER J. CUMMINGS, Circuit Judge

Hon. JULIUS J. HOFFMAN, District Judge

No. 73-1229

RESEARCH CORPORATION,
Plaintiff-Appellant,

vs.

NASCO INDUSTRIES, INC.,
Defendant-Appellee.

Appeal from the United States District Court for the Western District of Wisconsin.

On consideration of the plaintiff-appellant's petition for rehearing and in banc review in the above-entitled appeal, and no member of the panel and no judge in regular active service having requested that a vote be taken on the suggestion for an *in banc* rehearing, and the panel having voted to deny a rehearing,

IT IS ORDERED that the plaintiff-appellant's petition for rehearing and *in banc* review in the above-entitled appeal be, and the same is hereby denied.

— Opinion by Judge Hoffman —

UNITED STATES COURT OF APPEALS

For The Seventh Circuit

Chicago, Illinois 60604

June 21, 1974

Before

Hon. ROGER J. KILEY, Senior Circuit Judge

Hon. WALTER J. CUMMINGS, Circuit Judge

Hon. JULIUS J. HOFFMAN, Senior District Judge*

RESEARCH CORPORATION, Plaintiff-Appellant, vs. NASCO INDUSTRIES, INC. Defendant-Appellee. No. 73-1229	Appeal from the United States District Court for the Western District of Wisconsin.

This cause came on to be heard on the transcript of the record from the United States District Court for the Western District of Wisconsin, and was argued by counsel.

On consideration whereof, it is ordered and adjudged by this court that the judgment of the said District Court in this cause appealed from be, and the same is hereby, AFFIRMED, with costs, in accordance with the opinion of this Court filed this day.

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* Senior District Judge Julius J. Hoffman of the Northern District of Illinois is sitting by designation.